## BMP #36 - Sodding

**Targeted Pollutants**

- ● Sediment
- ◒ Phosphorus
- ◒ Trace metals
- ○ Bacteria
- ○ Petroleum hydrocarbons

**Physical Limits**

| | |
|---|---|
| Drainage area | unlimited |
| Max slope | 14% |
| Min bedrock depth | 2 ft |
| Min water table | 2 ft |
| SCS soil type | ABCD |
| Freeze/Thaw | fair |
| Drainage/Flood control | no |

### DESCRIPTION

This BMP entails the placement of rolls or strips of sod as a landscape planting or erosion control measure. Sod is a layer of soil bound by grass and plant roots into a thick mat. It is commercially available in rolled strips that are laid over an area of exposed soil. Sod stabilizes the area by immediately covering the surface with vegetation and enabling storm water to infiltrate into the ground.

### APPLICATIONS

Sodding is appropriate for any graded or cleared area that might erode and where a permanent, long-lived plant cover is needed immediately. It can be a temporary or permanent BMP. Possible uses for sod include buffer zones, stream banks, dikes, swales, slopes, outlets, level spreaders, and filter strips.

Primary advantages of sod are:

- Provides immediate dense vegetative cover and erosion control.
- Provides more stabilizing protection than initial seeding.
- Generates less weed growth than seeded vegetation does.
- Can be available for site activities (open to foot traffic) within a shorter time than can seeded vegetation.
- Can be placed at any time of the year as long as water is available and moisture conditions in the soil are favorable.

### LIMITATIONS

- Purchase and installation costs are higher than for seeding.
- Continued irrigation may be required if the sod is placed during dry seasons or on sandy soils. Watering may be necessary after planting and during periods of drought or intense heat.
- Sod should not be installed during very hot or wet weather.

### DESIGN PARAMETERS

Materials: Use grasses that require little or no maintenance (watering or fertilizing). This may require advance planning to obtain grasses that are desirable for the location.

Site preparation: The soil surface should be find graded before laying down the sod. Topsoil may be needed in areas where soil textures or conditions are inadequate (such as dense or impermeable soils). Add lime and fertilizers as needed to promote good plant growth conditions.

Slope: Do not place sod on slopes greater than 3:1 if slopes are to be mowed. If placed on steep slopes, the sod should be laid with staggered joints or be pegged down (or both).

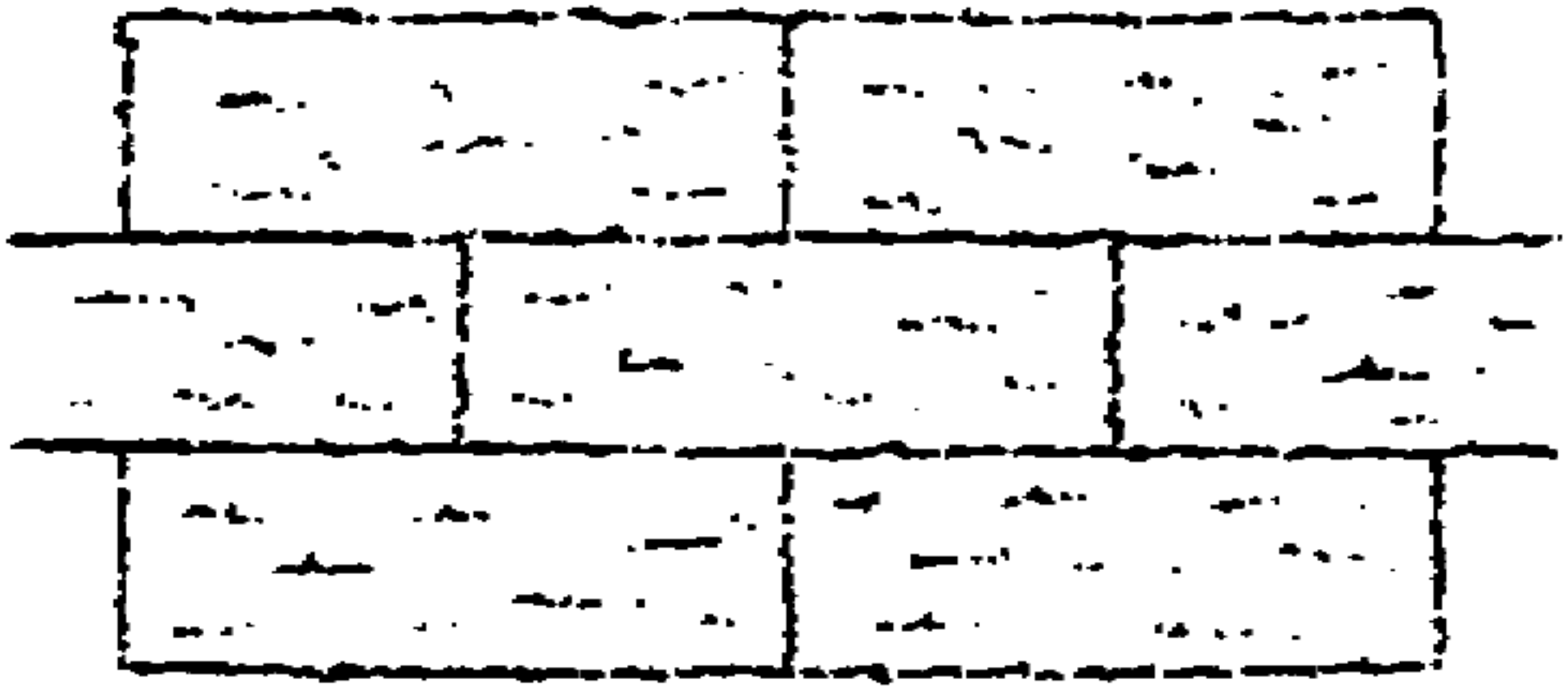
Installation methods: Sod can be applied in strips or other patterns, or alternate areas can be seeded to reduce expense. If placed on steep slopes or next to running waterways, consider placing chicken wire, jute, or other matting over the sod for extra protection against lifting. See BMP #14-Matting and Netting or BMP #13-Geotextiles.

**CONSTRUCTION GUIDELINES**

- Spread and grade the topsoil (if used). Sod may be placed directly on the ground (without topsoil) only if it has been specifically grown for sites with no topsoil.
- Prepare the soil surface by fine-grading the surface before laying sod. Sodding should then take place immediately after the soil bed is established.
- Lay the sod in a staggered pattern, as shown. Sod in waterways must be laid parallel to the flow.
- Sod can be laid in strips on the contour to reduce effective slope length.
- Roll or compact the sod immediately after installation to ensure firm contact with the underlying soil.
- Water to a depth of 4 inches (100 mm), as needed.

**MAINTENANCE**

- Inspect the sod frequently after it is first installed, especially after large storm events, until it is established as permanent cover. Remove and replace any dead sod.
- Once the sod is established, mow the area as needed.
- Water as often as necessary during periods of intense heat or lack of rain.
- Sodding usually serves as both a temporary and permanent measure and therefore does not require removal.



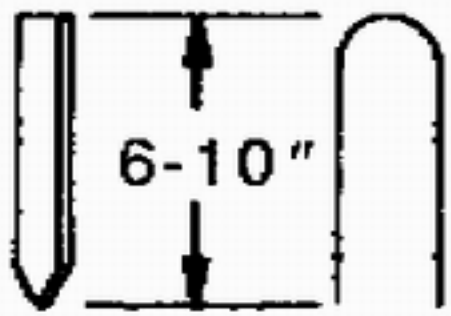
Lay sod in a staggered pattern with strips butted tightly against each other. A sharpened mason's trowel can be used to tuck down the ends and trim pieces.

Correct

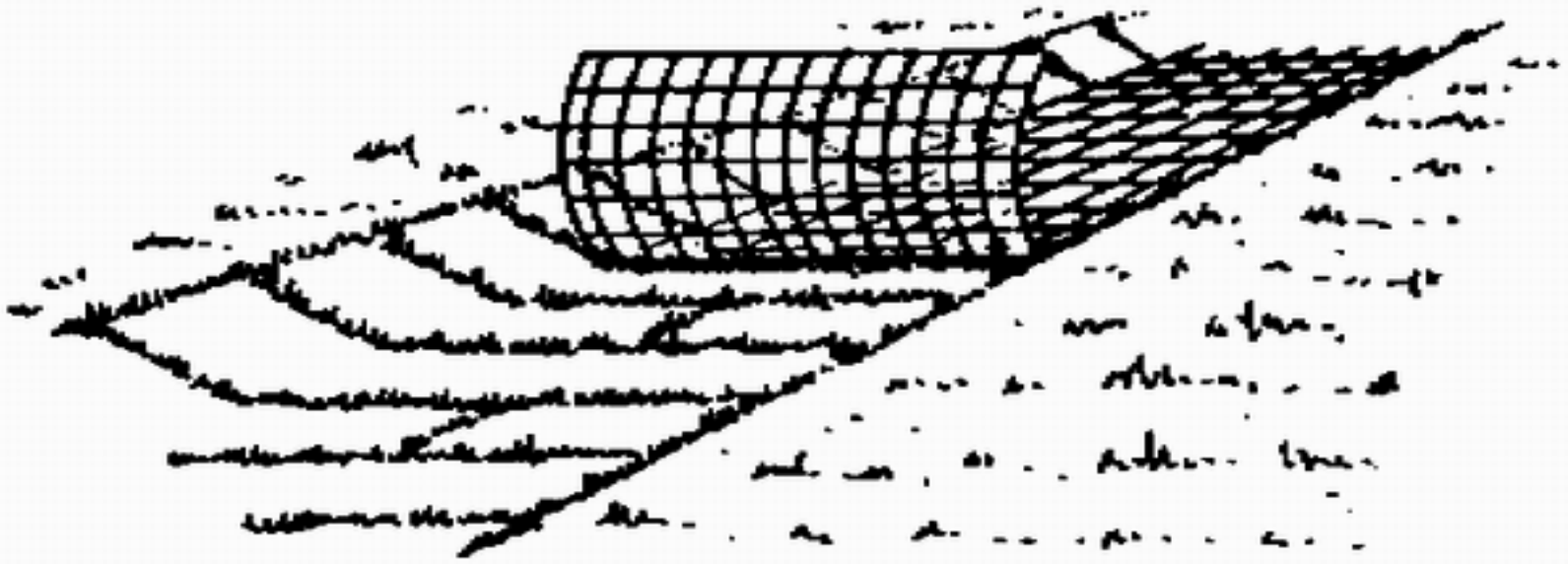
Incorrect

Butting—angled ends caused by the automatic sod cutting must be matched correctly.


Lay sod across the direction of flow.




Use pegs or stables to fasten sod firmly at the ends of strips and in the center, or every 3-4' if the strips are long. When ready to mow, drive pegs or staples flush with the ground.

In critical areas, secure sod with netting and staples.